

10/500269

10 FEBRUARY 2003 10.02.03

Rec'd PCT/PTO 24 JUN 2004

REC'D 21 FEB 2003

WIPR

PCT

PA 941111

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

December 31, 2002

THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM  
THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK  
OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT  
APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A  
FILING DATE UNDER 35 USC 111.

APPLICATION NUMBER: 60/342,130

FILING DATE: December 26, 2001

PRIORITY  
DOCUMENT

SUBMITTED OR TRANSMITTED IN  
COMPLIANCE WITH RULE 17.1(a) OR (b)

By Authority of the  
COMMISSIONER OF PATENTS AND TRADEMARKS

  
P. R. Grant

P. R. GRANT  
Certifying Officer

BEST AVAILABLE COPY

Please type a plus sign (+) inside this box → 

PTO/SB/16 (02-01)

Approved for use through 10/31/2002. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

JC972 U.S. PTO  
60/342130  
12/26/01

12/26/01

**PROVISIONAL APPLICATION FOR PATENT COVER SHEET**

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

Express Mail Label No. \_\_\_\_\_

**INVENTOR(S)**

Given Name (first and middle [if any])	Family Name or Surname	Residence (City and either State or Foreign Country)
Michael Ronald S.	MAGUIRE ZINN	Kitchener, CANADA Kitchener, CANADA

 Additional inventors are being named on the \_\_\_\_\_ separately numbered sheets attached hereto**TITLE OF THE INVENTION (280 characters max)**

USER INTERFACE AND METHOD OF VIEWING UNIFIED COMMUNICATION EVENTS ON A WIRELESS DEVICE

Direct all correspondence to:

**CORRESPONDENCE ADDRESS** Customer Number \_\_\_\_\_Place Customer Number  
Bar Code Label here

OR

Type Customer Number here \_\_\_\_\_

 Firm or  
Individual Name

Krishna K. Pathiyal, Esq.

Address

Research In Motion Limited

Address

295 Phillip Street

City

Waterloo

State

Ontario

ZIP

N2L 3W8

Country

CANADA

Telephone

(519)888-7465

Fax

(519)888-1975

**ENCLOSED APPLICATION PARTS (check all that apply)** Specification Number of Pages

12

 CD(s), Number \_\_\_\_\_ Drawing(s) Number of Sheets

5

 Other (specify) \_\_\_\_\_

Power of Attorney

 Application Data Sheet. See 37 CFR 1.76**METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT** Applicant claims small entity status. See 37 CFR 1.27.

FILING FEE

 A check or money order is enclosed to cover the filing fees

AMOUNT (\$)

 The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number:

50-1995

160.00

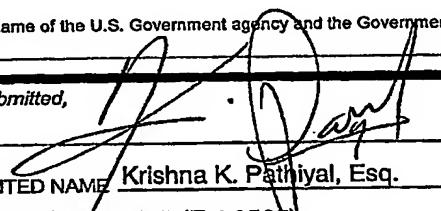
 Payment by credit card, Form PTO-2038 is attached.

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

 No. Yes, the name of the U.S. Government agency and the Government contract number are: \_\_\_\_\_

Respectfully submitted,

Date 12/21/01

SIGNATURE 

REGISTRATION NO.

TYPED or PRINTED NAME Krishna K. Pathiyal, Esq.

(if appropriate)  
Docket Number:

TELEPHONE (519) 888-7465 (Ext 2535)

44435

PUS-0532

**USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT**

This collection of information is required by 37 CFR 1.51. The information is used by the public to file (and by the PTO to process) a provisional application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete provisional application to the PTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Box Provisional Application, Assistant Commissioner for Patents, Washington, D.C. 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL

## for FY 2002

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$ 160.00)

## Complete if Known

Application Number	
Filing Date	
First Named Inventor	Michael MAGUIRE
Examiner Name	
Group Art Unit	
Attorney Docket No.	PUS-0532

## METHOD OF PAYMENT

1.  The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number **50-1995**

Deposit Account Name **Research In Motion Limited**

Charge Any Additional Fee Required  
Under 37 CFR 1.16 and 1.17

Applicant claims small entity status  
See 37 CFR 1.27

2.  Payment Enclosed:

Check  Credit card  Money Order  Other

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity Small Entity

Fee Code (\$)	Fee (\$)	Fee Code (\$)	Fee Description	Fee Paid
101	740	201	370	Utility filing fee
106	330	206	165	Design filing fee
107	510	207	255	Plant filing fee
108	740	208	370	Reissue filing fee
114	160	214	80	Provisional filing fee
				<b>160.00</b>

SUBTOTAL (1) (\$ 160.00)

## 2. EXTRA CLAIM FEES

	Extra Claims	Fee from below	Fee Paid
Total Claims			
Independent Claims			
Multiple Dependent			

-20\*\* =  X  =   
-3\*\* =  X  =

Large Entity Small Entity

Fee Code (\$)	Fee (\$)	Fee Code (\$)	Fee Description
103	18	203	9
102	84	202	42
104	280	204	140
109	84	209	42
110	18	210	9
			Claims in excess of 20
			Independent claims in excess of 3
			Multiple dependent claim, if not paid
			** Reissue independent claims over original patent
			** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

\*\*or number previously paid, if greater. For Reissues, see above

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
105	130	205	65
127	50	227	25
139	130	139	130
147	2,520	147	2,520
112	920*	112	920*
113	1,840*	113	1,840*
115	110	215	55
116	400	216	200
117	920	217	460
118	1,440	218	720
128	1,960	228	980
119	320	219	160
120	320	220	160
121	280	221	140
138	1,510	138	1,510
140	110	240	55
141	1,280	241	640
142	1,280	242	640
143	460	243	230
144	620	244	310
122	130	122	130
123	50	123	50
126	180	126	180
581	40	581	40
146	740	246	370
149	740	249	370
179	740	279	370
169	900	169	900
		Other fee (specify) _____	

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

## SUBMITTED BY

Name (Print/Type)	Signature	Complete if applicable
Krishna K. Pathiyal, Esq.		Registration No. 44435 (Attorney/Agent)
		Telephone (519) 888-7465 x 2535

Date 12/21/01

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

(MM/DD/YYYY)

Burden Hour Statement. This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



**VIA COURIER**

December 20, 2001

**BOX PROVISIONAL APPLICATION**  
Assistant Commissioner for Patents  
Washington, D.C. 20231  
USA

Dear Sir:

Re: **NEW PROVISIONAL PATENT APPLICATION**  
Title: **USER INTERFACE AND METHOD OF VIEWING UNIFIED  
COMMUNICATION EVENTS ON A WIRELESS DEVICE**  
Inventor(s): **Michael MAGUIRE et al.**  
Our Ref: **PUS-0532**

Enclosed in connection with this new provisional patent application are the following:

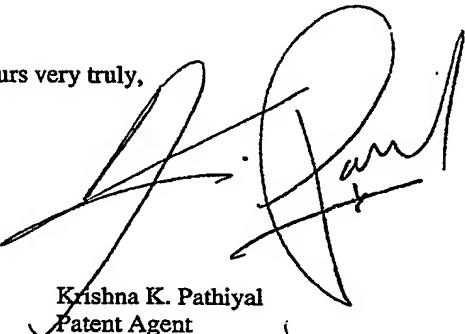
	<u>Number of Pages</u>
(1) Provisional Application for Patent Cover Sheet (including fee payment and method)	1
(2) Fee Transmittal Sheet	2
(3) Specification	12
(4) Drawing(s)	No. of Figures: <u>5</u> 4
(5) Power of Attorney	2
(6) Receipt Card	1

**Payment of Fees:**

In sum, please charge the following fees to our deposit account as indicated on the Cover Sheet:

Filing fee of \$160.00

Yours very truly,



Krishna K. Pathiyal  
Patent Agent

**User Interface And Method Of Viewing  
Unified Communication events On A Wireless Device**

5

**BACKGROUND**

1. **FIELD OF THE INVENTION**

This invention relates generally to a user interface for messaging. More particularly, the invention provides a user interface and method for displaying a communication event in context with select stored communication events. The invention is particularly well-suited for displaying voice and/or video call information, short messaging service (SMS) communication events, e-mail, web, and wireless access protocol (WAP) communication events on Personal Digital Assistants, mobile communication devices, cellular phones, and wireless two-way communication devices (collectively referred to herein as "wireless devices"). The invention provides utility, however, in any device that displays communication events of any type.

2. . . **DESCRIPTION OF THE RELATED ART**

Most cellular networks such as Code Division Multiple Access (CDMA) and Global Service Mobile (GSM) provide mostly voice and some data services. Voice services are typically compatible with plain old telephony service (POTS). Short Messaging Service (SMS) and 20 Wireless Application Protocol (WAP) is available on some cellular networks. Data networks, such as MobiTex<sup>TM</sup>, Datatac<sup>TM</sup>, as well as advanced networks such as General Packet Radio Service (GPRS), and Universal Mobile Telecommunications System (UMTS), may allow an

appropriately configured wireless device to offer data services such as e-mail, web browsing, as well as SMS and WAP. Future networks may also offer video services.

Wireless devices, may become complex to operate to send and receive data, voice, and/or video. The user interfaces currently available for viewing communications on a wireless device, 5 however, may only enable a user to view the contents of one communication event of one particular type at a time. For example, Fig. 1 shows a typical user interface 10A for viewing an SMS communication event on a wireless device. This known user interface 10A only displays information about a single SMS communication event, and only enables the user to take two actions in response to the SMS communication event. Viewing only the information shown in Fig. 1, a user may be unable to place the SMS communication event in context with other communication events of the SMS type. A known improvement is the user interface 10B shown in Fig. 2 that displays several communication events of the call type. This known user interface 10B, although displaying more than one communication event, recent calls, only displays information about a single type of communication event, i.e. displays calls but no SMS.

#### SUMMARY

A user interface and method for viewing unified communication events on a wireless device includes a viewing screen, a processor, a memory device and a communication event software interface module. The memory device stores communication events of various types 20 that have been transmitted or received by the wireless device. The communication event software interface module is executed by the processor and (a) filters each of the communication events stored in the memory device to identify one or more select communication events meeting

a pre-set criteria, and (b) displays the one or more select communication events unified on the viewing screen.

#### BRIEF DESCRIPTION OF THE DRAWINGS

5 Fig. 1 shows a typical user interface for viewing an SMS message on a wireless device;  
Fig. 2 shows a typical user interface for viewing recent calls on a wireless device;  
Fig. 3 shows an exemplary user interface for unifying and viewing select stored communication events according to an embodiment of the invention; and  
Fig. 4 is a flow diagram showing an exemplary method for identifying stored communication events that are suitable to be unified and displayed with pre-set criteria.

#### DETAILED DESCRIPTION

Referring now to the figures, Fig. 3 shows an exemplary user interface 20 for a wireless device 21 that displays current communication event summary 22 unified with select stored communication events 24. The user interface 20 includes a viewing screen 26, a processor 28, a transceiver 30, and a memory device 32. The user interface 20 also includes a communication event software interface module 34 that is executed by the processor 28. Operationally, the communication event software interface module 34 stores incoming and outgoing communication events 36 in the memory device 32, and enables a user to simultaneously view the current communication event summary 22 and the select stored communication events 24.

The communication event software interface module 34 preferably saves and indexes every communication event transmitted or received by the wireless device 21. In an alternative embodiment, the communication event software interface module 34 may give the user the option to choose which communication events to save and which to discard.

5 Each stored communication event 36 preferably includes a communication event status 38 (unread, sent, read, missed, pending, incoming, outgoing, etc.) and both a communication event type 40 (call, e-mail, SMS, WAP, etc.) and communication event data 42 (caller id, header information, outside number, URL, etc.).

Select communication events 24 are displayed on the viewing screen 26. In Fig. 3, for example, the status of each select communication event is represented on the viewing screen 26 using a single letter, as well as using bold type to emphasize communication events which have not yet been attended to by the user. Conversely, italic type is used to represent communication events that have been attended to by the user, although attended events may also be omitted from the display to further emphasize the select communication events. Furthermore, the type of each select communication event is represented on the viewing screen 26 in Fig. 3, for example, by a short word or acronym. Furthermore, the data of each select communication event is represented on the viewing screen 26 in Fig. 3, for example, in the form of a short textual representation. Further still, the select communication events are represented on the viewing screen 26 in Fig. 3, for example, in the form of a table. It should be understood, however, that the user interface 20 is 20 not limited to use with those representations, or those illustrated types of communication events. Rather, the user interface 20 may be used with any form of communication event, such as e-mail

communication events, SMS communication events, web communication events, WAP communication events, as well as other data, voice, and video communication events.

In addition to the status 38, type 40, and data 42, the communication event software interface module 34 may also attach some type of indexing data 44 to each communication event, such as an ordinal value or a time-stamp indicating when the communication event was transmitted or received.

In addition to saving and indexing incoming and outgoing communication events, the communication event software interface module 34 filters the stored communication events 36 to select communication events relating to pre-set criteria. These filters, optionally allow the event software interface module to display a representation of the pre-set criteria 22 on the viewing screen 26, for example, a summary of the number and type of select communication events which are unattended to by the user, above the select communication events 26. The representation of pre-set criteria 22 may preferably be in terms of any attribute of communication events (stored or otherwise) currently being accessed by the user. For instance, the representation of pre-set criteria 22 may be defined in terms of attributes of a new communication event being composed by the user, a communication event recently received by the wireless device 21, or any stored communication event 36 selected by the user. Alternatively, the pre-set criteria may be defined in terms of contact information as selected from the fields in an address book, or URL's selected from bookmarks. Once a pre-set criteria 22 has been selected, the communication event software interface module 34 preferably assesses each stored communication event 36 to identify select communication events 24 matching criteria selected from a list of predefined matching criteria. In Fig. 3, for example, the pre-set criterion

22 illustrated includes communication events unattended to by the user indexed according to time stamp.

Although not shown in the drawings, preferably, as the user interacts with the select communication events 24 and/or the pre-set criteria 22, the communication event software 5 interface module 34 updates the viewing screen 26 to reflect any changes caused by the user interaction. For instance, if the user attends to a select communication event, for example, by reading an e-mail message associated to an unread communication event for an e-mail type communication, thereby changing the status of the email message to read, then the software interface module 34 changes the representation of the communication event from unread to read in order to reflect the change. Conversely, if the user changes the pre-set criteria by adding the criteria 22 to select only communication events of a given type, say SMS, then the communication event software interface module 34 reflects the change and selects only communication events of the SMS type.

Furthermore, although not shown in the drawings, any event, regardless of whether it is a communication event or any other event detectable by the wireless device 21, can trigger the message software interface module to use a particular pre-set criteria 22 to display select communication events 24. For example, in a wireless device 21 having calendar events, when a conference call calendar event occurs, processor 28 triggers the communication software interface module 34 with pre-set criteria 22 to preferably select and represent a pending outgoing 20 conference call communication event with higher priority than other select communication events. Alternatively, when wireless device 21 receives a communication, such as an e-mail message, SMS message, WAP page response, voice/video call, processor 34 triggers the

communication software interface module 34 with pre-set criteria 22 to preferably select and represent the received communication event with higher priority than other select communication events.

The pre-set criteria can also match communication event data. For instance, to view all 5 communication events sent to or received from a particular contact, the pre-set criteria may include matching select communication event data with all of the specific contact information found in an address book entry for the contact. As an example, consider all communication events sent to or received from a stockbroker. Contact information for the stockbroker is preferably kept in an address book entry. Preferably, each address book entry contains a variety 10 of fields that can be mapped to one or more communication event types supported by the wireless device. In the entry corresponding to the stockbroker, for example, if the following fields are defined: telephone number, mobile phone number, fax number, email address, and URL's; then an example preferable mapping to message types follows. The phone, mobile, and fax numbers are mapped to voice and/or video communication events. The mobile is mapped to SMS. The email address is mapped to email communication events. The URL's are mapped to corresponding communication event types. For instance an http URL can be mapped to web and/or WAP, whereas an FTP URL (File Transfer Protocol) can be mapped to an ftp 20 communication event. All communication events, including phone calls, SMS communication events, emails, web communication events, WAP communication events or other communication events that match at least one field in the stockbroker contact entry of the address book would then be selected by the communication event software interface module 34, and would be

displayed on the viewing screen 26. Preferably, a representation 22 of the pre-set criteria would show the contact name, such as "stockbroker".

In another embodiment, the communication event software interface module 34 may identify related stored communication events 24 by comparing the communication event data 42 of each stored communication event 36 with keywords selected by the user. This alternative method of matching the current communication event 22 with select stored communication events 24 may be implemented by itself, or as a means of further limiting the select communication events 24 identified by the other methods described herein. To continue the previous stockbroker example, further pre-set criteria 22 can be added to further filter the select communication events, for instance, based on the communication event data 42. The communication event data may include, for instance stock quotes obtained via WAP using an URL as well as notes taken during phone calls with the stockbroker. The user may therefore decide to choose pre-set criteria that, as well as matching contact information, further matches a regular expression, such as for example, the keywords "buy" or "sell". By allowing the user to configure the pre-set criteria, the communication event software interface module 34 unifies communication events based on pre-set criteria which are important to the user at a specific point in time – in this example, for instance, allowing the user to unify a stock pick provided by a stockbroker over a phone call or e-mail with a stock quote retrieved subsequently by the user via WAP in order to take a decision to either communicate a buy, sell, or hold directive to his stockbroker or to a trading system (not shown).

Fig. 4 is a flow diagram showing an exemplary method 50 for selecting and displaying 26 communication events that may be stored 32, as well as received and transmitted 30, that are

related to at least one filter criterion 51. In step 52, at least one criterion 51 is set as the pre-set criteria when the communication event software interface module is triggered by an event 54 on the mobile device. Event triggers are, for example, user interaction, communication transmission or reception, or any other type of event detectable by mobile device 10. An example of at least 5 one criterion is represented 22 in Fig. 3, wherein the pre-set criteria used in Fig. 3, is for example, unattended messages.

In step 55, all communication events, whether stored 32, or transmitted and received 30, are processed through steps 56-62. Preferably, in step 55, the next communication event which matches criteria 51 is obtained from storage 32, or, if the next communication event is not yet found in storage, it is stored, preferably generating indexing data, such as a time stamp. In step 55, all stored communication events are marked as unprocessed in relation to the pre-set criteria. The stored communication events may be marked by means of a Boolean flag, a stack of communication event identifiers, or any other means of distinguishing processed from unprocessed communication events. Then, in steps 56-62, each stored communication event is processed by the communication event software interface module 34 to determine if it is to be selected according to the pre-set criteria. Once a stored communication event has been processed, it is marked as processed in step 60, and steps 56-62 are repeated until every stored communication event has been processed.

In the processing steps 56-62, unified communication events are selected, preferably 20 based on pre-set criteria: whether the communication event matches the at least one criterion 51. In steps 56, the stored communication event is obtained from the communication event storage memory device 32, and compared with the pre-set criteria 51. An exemplary method for

determining whether the stored communication event matches the pre-set criteria is illustrated in Fig. 5. If the communication event matches the pre-set criteria, then the communication is selected and displayed at step 58. If the communication event and pre-set criteria do not match, however, then further processing is unnecessary, and the stored communication event is marked 5 as processed in step 60.

If, however, the stored communication event matches pre-set criteria, then it is either displayed or appended to a unified communication event list 59 before being marked as processed in step 60. The unified communication event list 59 may comprise a collection of unique identifiers that allow the select communication events to be identified and retrieved, or, alternatively, it might comprise complete copies of the select communication events. In step 62, once all of the stored communication events have been processed, the select communication events, found in the unified communication event list 59, are displayed on the viewing screen 26 along with the pre-set criteria 51. Each communication event may be displayed along with its data or attributes matching pre-set criteria, or alternatively the pre-set criteria may be displayed only once since it is the same for each displayed communication event. In an alternative embodiment, the select communication events may appear on the viewing screen 26 as they are identified in step 58.

Fig. 5 is a flow diagram showing an exemplary method 70 for determining whether a stored 20 communication event matches all pre-set criteria 51. In step 72, it is determined whether the stored communication event matches pre-set status criteria. If the stored communication event matches the pre-set status criteria, then the stored communication event is compared with the pre-set type criteria (step 74). In step 74, it is determined whether the stored

communication event matches pre-set type criteria. If the stored communication event matches the pre-set type criteria, then the stored communication event is compared with the pre-set data criteria (step 76). If the stored communication event matches the pre-set data criteria, then the stored communication event is compared with the pre-set index criteria (step 78). In step 78, it is 5 determined whether the stored communication event matches pre-set index criteria. If the stored communication event matches the pre-set index criteria, then the stored communication event matches (step 80). Alternatively, if at any of steps 72-78, the stored communication event does not match the pre-set criteria 51, then no further processing is required and the stored communication event does not match (step 82).

Preferably, the steps 72-78 will match all stored messages for an "any" pre-set criteria. For example, if the pre-set criteria specify only that the data criteria is "contact is stockbroker" and that all other criteria are "any", then in step 72, 74 and 78 all stored messages match the "any" status criteria, whereas in step 76 only stored messages which match the "contact is stockbroker" data criteria will match. The order of and exact type of test in Fig. 5 is provided as an example only.

The embodiments described herein are examples of structures, systems or methods having elements corresponding to the elements of the invention. This written description may enable those skilled in the art to make and use embodiments having alternative elements that likewise correspond to the elements of the invention. The intended scope of the invention thus 20 includes other structures, systems or methods that do not differ from the literal language of the description, and further includes other structures, systems or methods with insubstantial differences from the literal language of the description.

## **ABSTRACT**

A user interface and method for viewing communication events on a wireless device includes a viewing screen, a processor, a memory device and a communication event software interface module. The memory device stores communication events that have been transmitted or received by the wireless device. The communication event software interface module is executed by the processor and (a) filters each of the communication events stored in the memory device to identify one or more select communication events meeting a pre-set criteria, and (b) displays the one or more select communication events on the viewing screen.

SEARCHED - INDEXED

Please type a plus sign (+) inside this box → **[ ] +**

PTO/SB/81 (02-01)

Approved for use through 10/31/2002. OMB 0651-0035

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it display a valid OMB control number.

## POWER OF ATTORNEY OR AUTHORIZATION OF AGENT

Application Number	
Filing Date	
First Named Inventor	Michael MAGUIRE
Title	User Interface And Method..
Group Art Unit	
Examiner Name	
Attorney Docket Number	PUS-0532

I hereby appoint:

Practitioners at Customer Number



Place Customer  
Number Bar Code  
Label here

OR

Practitioner(s) named below:

Name	Registration Number
Krishna K. Pathiyal, Esq.	44435

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

The above-mentioned Customer Number.

OR

Practitioners at Customer Number



Place Customer  
Number Bar Code  
Label here

OR

Firm or  
Individual Name

Krishna K. Pathiyal, Esq.

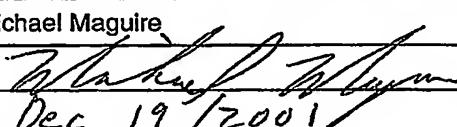
Address Research In Motion Limited  
Address 295 Phillip Street  
City Waterloo State Ontario Zip N2L 3W8  
Country CANADA  
Telephone (519) 888-7465 Fax (519) 888-1975

I am the:

Applicant/Inventor.

Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

### SIGNATURE of Applicant or Assignee of Record

Name Michael Maguire  
Signature   
Date Dec 19/2001

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

\*Total of 2 forms are submitted.

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) Inside this box → **[+]**

PTO/SB/81 (02-01)

Approved for use through 10/31/2002. OMB 0651-0035  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it display a valid OMB control number.

## POWER OF ATTORNEY OR AUTHORIZATION OF AGENT

Application Number	
Filing Date	
First Named Inventor	Michael MAGUIRE
Title	User Interface And Method..
Group Art Unit	
Examiner Name	
Attorney Docket Number	PUS-0532

I hereby appoint:

Practitioners at Customer Number  → **Place Customer Number Bar Code Label here**  
**OR**  
 Practitioner(s) named below:

Name	Registration Number
Krishna K. Pathiyal, Esq.	44435

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

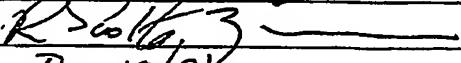
The above-mentioned Customer Number.  
**OR**  
 Practitioners at Customer Number  → **Place Customer Number Bar Code Label here**  
**OR**

<input checked="" type="checkbox"/> Firm or Individual Name	Krishna K. Pathiyal, Esq.			
Address	Research In Motion Limited			
Address	295 Phillip Street			
City	Waterloo	State	Ontario	Zip N2L 3W8
Country	CANADA			
Telephone	(519) 888-7465	Fax	(519) 888-1975	

I am the:

Applicant/Inventor.  
 Assignee of record of the entire interest. See 37 CFR 3.71.  
*Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).*

### SIGNATURE of Applicant or Assignee of Record

Name	Ronald S. Zinn
Signature	
Date	Dec 19/02

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

Total of 2 forms are submitted.

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

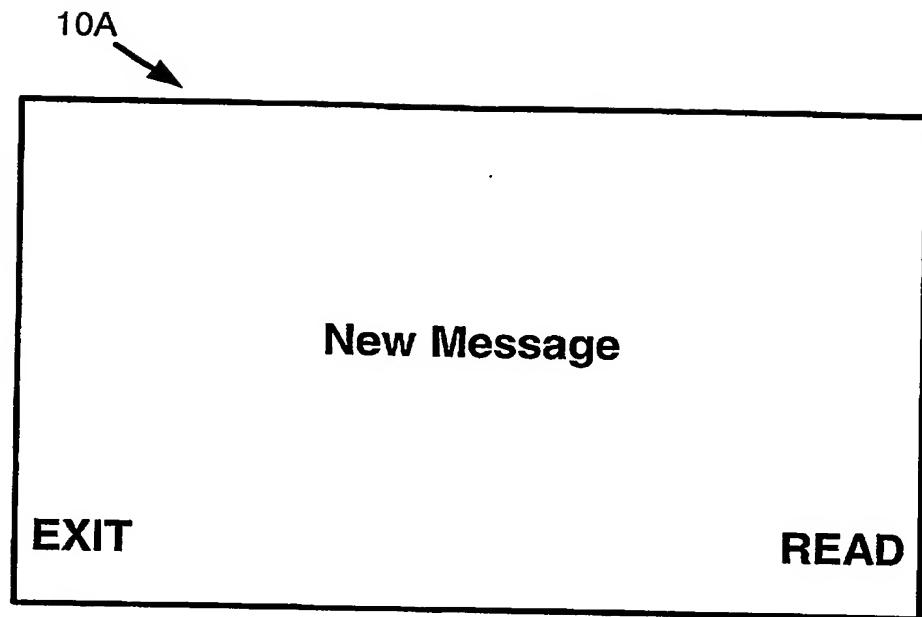


FIG. 1

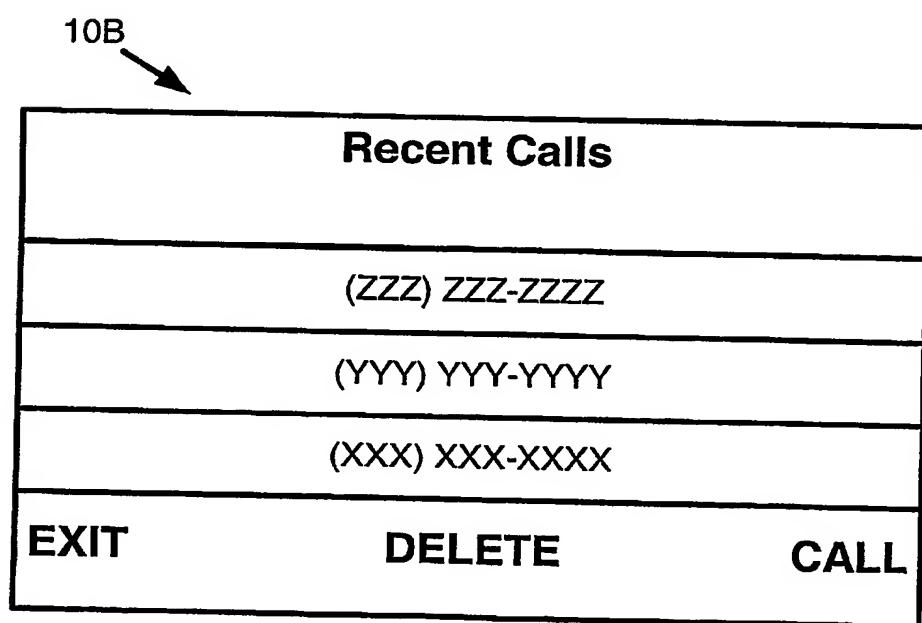


FIG. 2

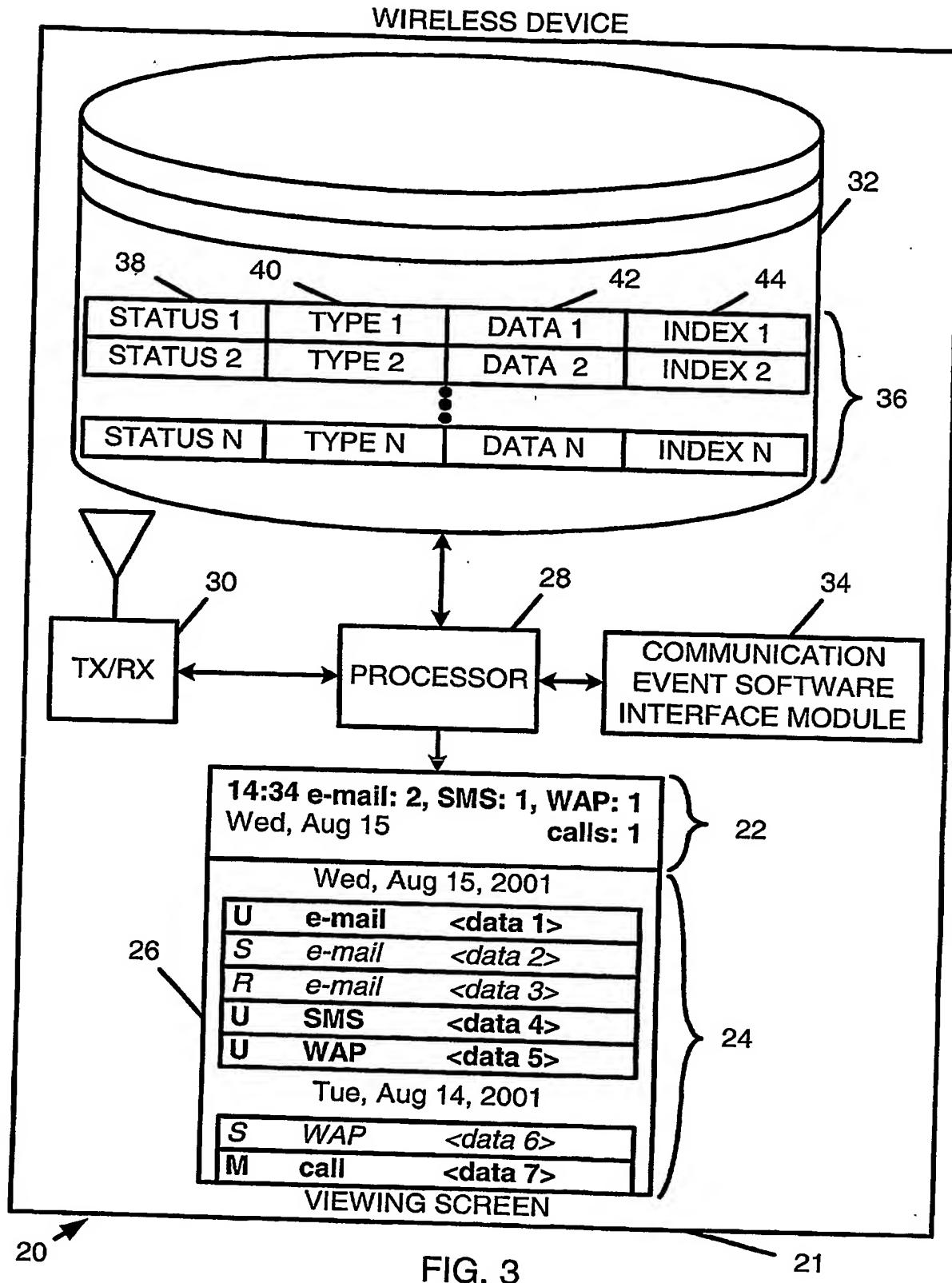


FIG. 3

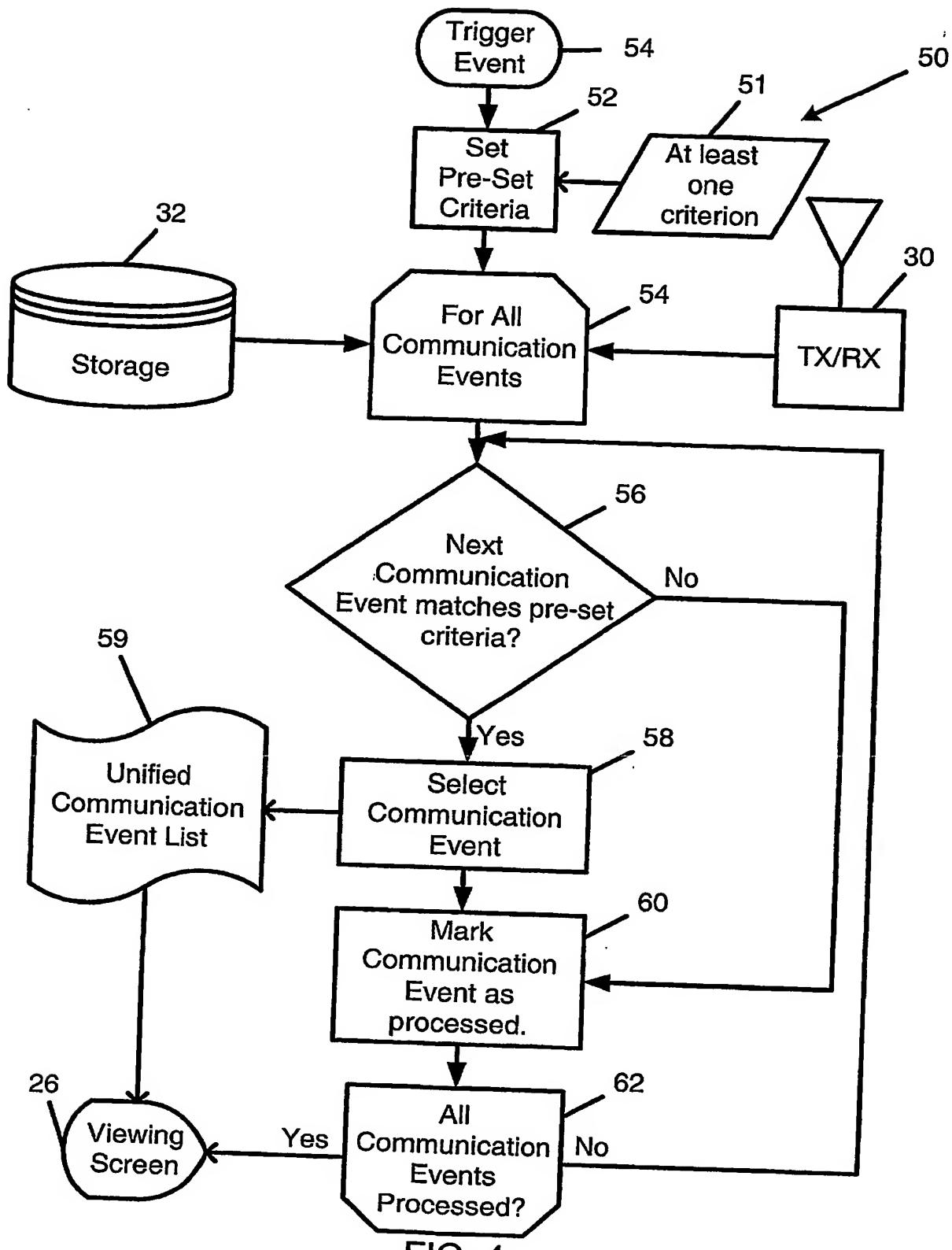
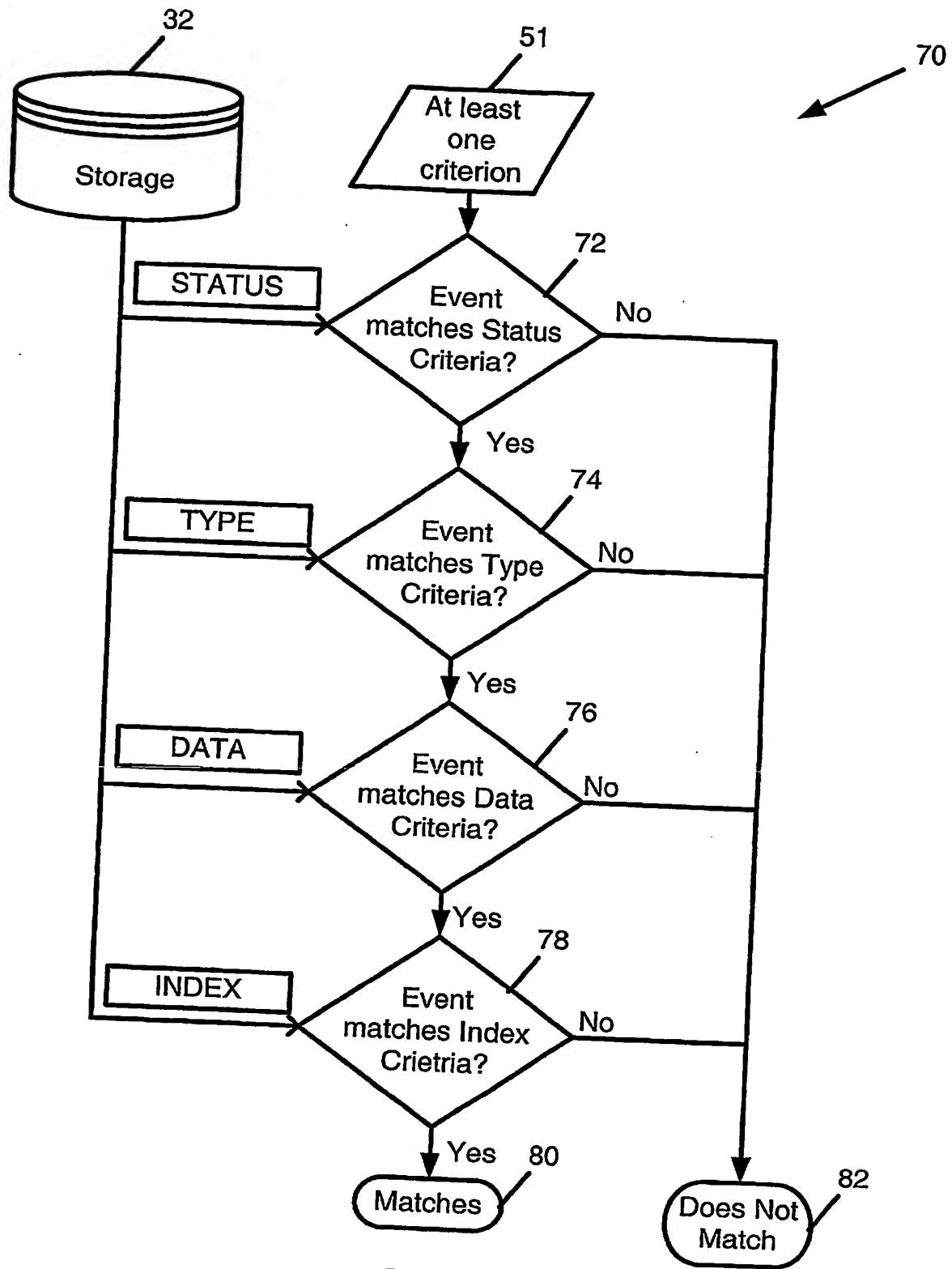
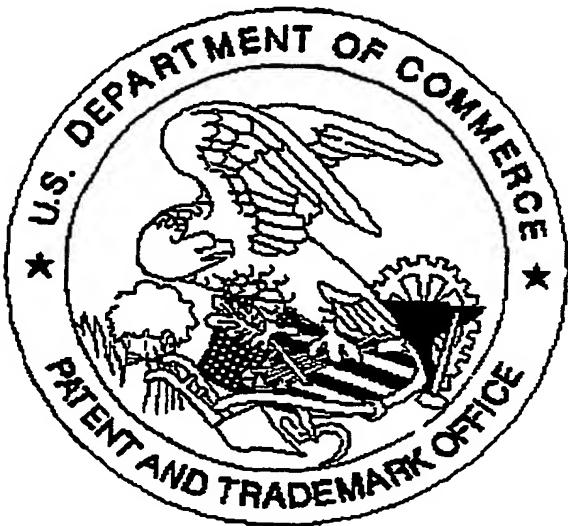


FIG. 4



United States Patent & Trademark Office  
Office of Initial Patent Examination – Scanning Division



SEARCHED  
INDEXED  
SERIALIZED  
FILED

Application deficiencies found during scanning:

Page(s) \_\_\_\_\_ of \_\_\_\_\_ were not present  
for scanning. (Document title)

Page(s) \_\_\_\_\_ of \_\_\_\_\_ were not present  
for scanning. (Document title)

There are only 4 pages of drawings.

*Scanned copy is best available.*

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**